

Environmental Management Systems at the Region 4 Office

January 2005





Goal of Presentation: Awareness

- 1. What is an Environmental Management System (EMS)?**
- 2. What is our EMS Policy?**
- 3. What are our EMS objectives?**
- 4. What is my role and responsibility?**



What is an Environmental Management System (EMS)?

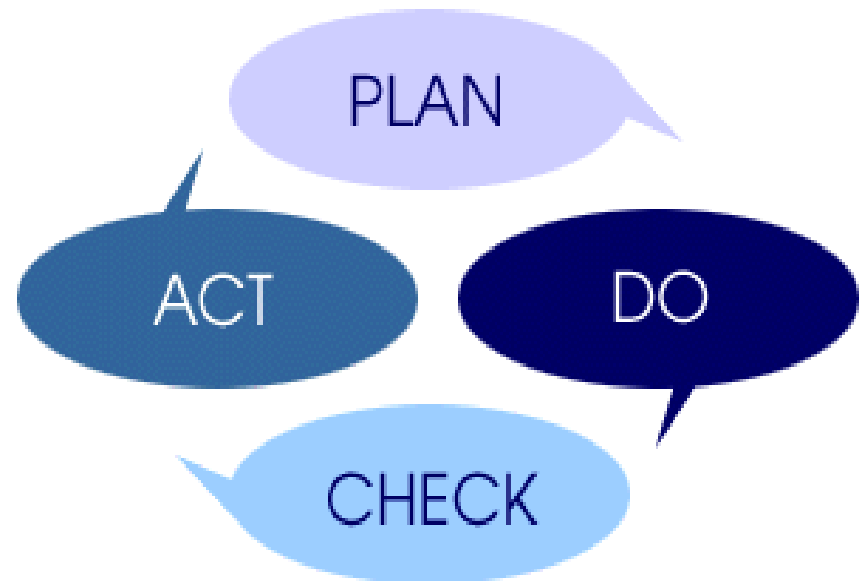
- **ENVIRONMENTAL** – It seeks to reduce the adverse impacts of the organization's activities, products and services.
- **MANAGEMENT** – It sets policy, plans, procedures, evaluations and responsibilities.
- **SYSTEM** – It provides a structure for operations, assessment and corrective action.



Stages of an EMS

- Commitment and policy;
- Aspects and impacts;
- Implementation;
- Evaluation;
- Review.

Continuous
improvement.



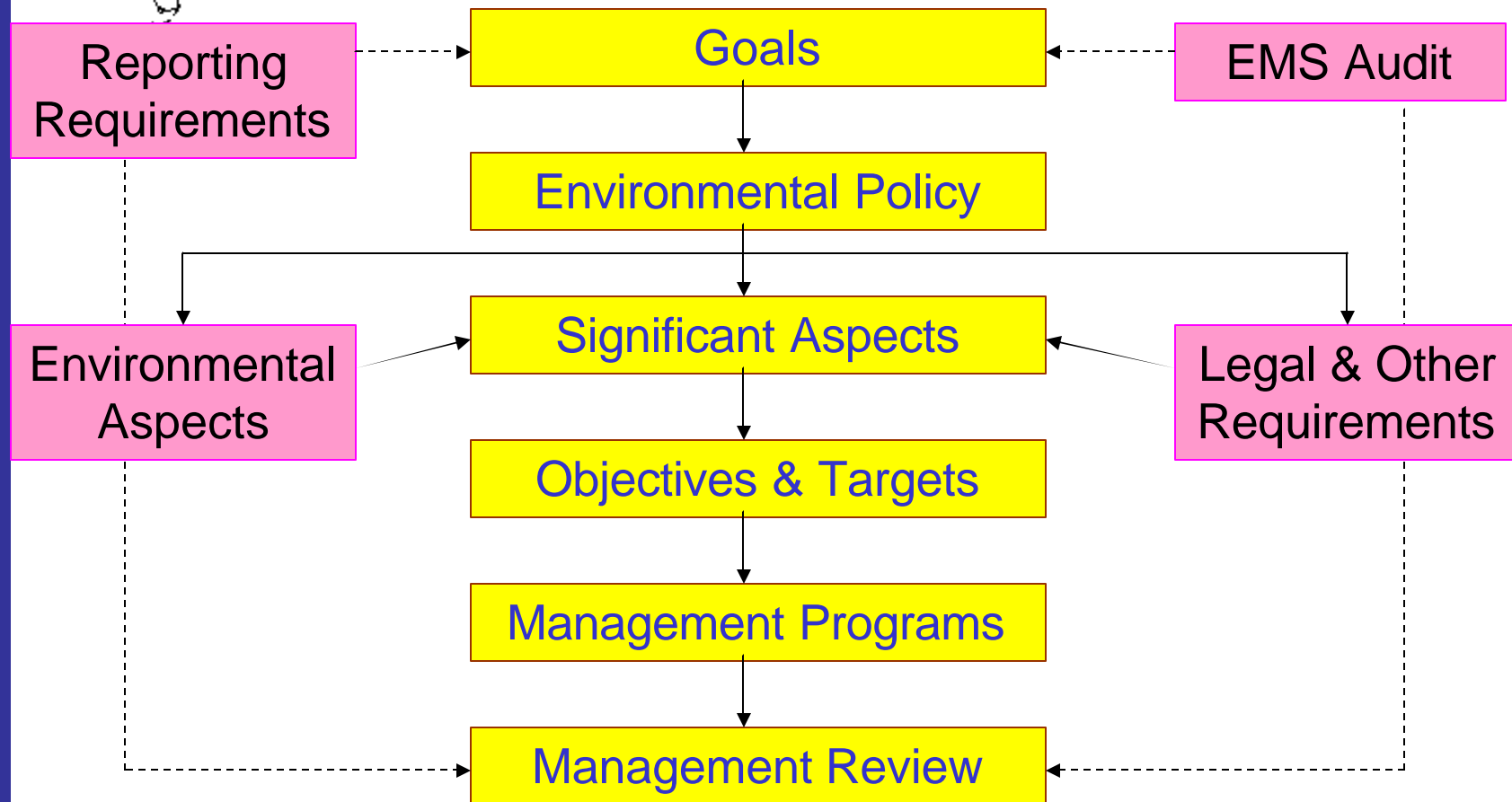


Elements of an EMS

- ISO 14001 Framework;
- Environmental aspects and impacts;
- Identifying "significant aspects";
- Objectives and targets;
- Environmental management programs;
- Operational controls;
- EMS audit;
- Review by site management.



ISO 14001 Framework





Outcomes of an EMS

- Helps us understand how we impact the environment;
- Helps us to meet “Greening the Government” Executive Orders and other regulations;
- Increased employee participation;
- Benchmarks our performance;
- Coordinates various environmental efforts;
- Provides direction for meaningful continuous improvement.



Executive Order 13148

- "Greening the Government Through Leadership in Environmental Management".
- Signed on April 21, 2000.
- Head of each Federal agency responsible for integrating environmental accountability into agency decision-making and long-term planning processes across all activities and functions.
- Environmental management considerations to be a fundamental and integral component of Federal Government policies, operations, planning, and management.



Administrator's Position Statement

- Supports Executive Order 13148.
- Signed May 2002.
- Advocates the use of an EMS as the mechanism for achieving the goals of the EO.
- Encourages the use of recognized EMS frameworks such as ISO 14001.
- EPA will lead by example by implementing EMSs at appropriate EPA facilities.



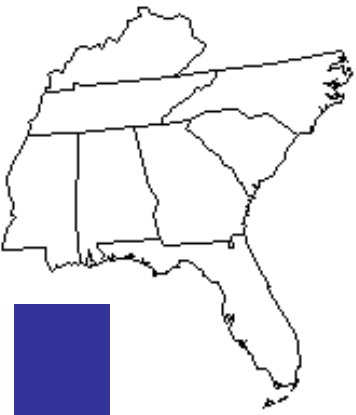
Importance of EMS to EPA

- EPA will lead by example: 34 locations identified for EMS implementation
- Program has agency-wide EMS support.
- EPA to be evaluated against other agencies.
- Score card being developed for government agencies.



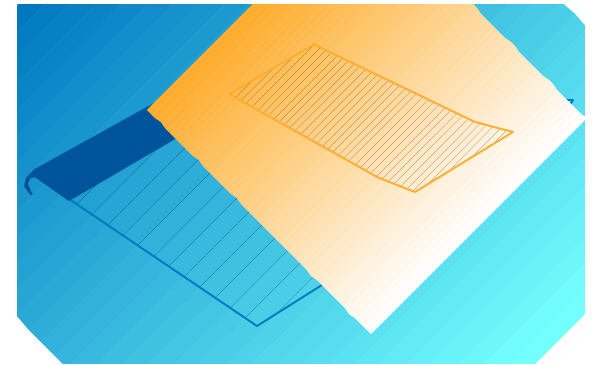
Why Implement an EMS at Region 4?

- To become more fully aware of the adverse environmental impacts of all Region 4 activities with a focus on reducing or eliminating those impacts.
- To reduce the amount and cost of resources by eliminating wasteful practices.
- Comply with Executive Order 13148 and Administrator's Position Statement.



Region 4 Policy

- Commits Region 4 to implement an EMS.
- Enacted April 15, 2003.
- Signed by the RA, DRA and ARA.
- Can review on Region 4 EMS website.



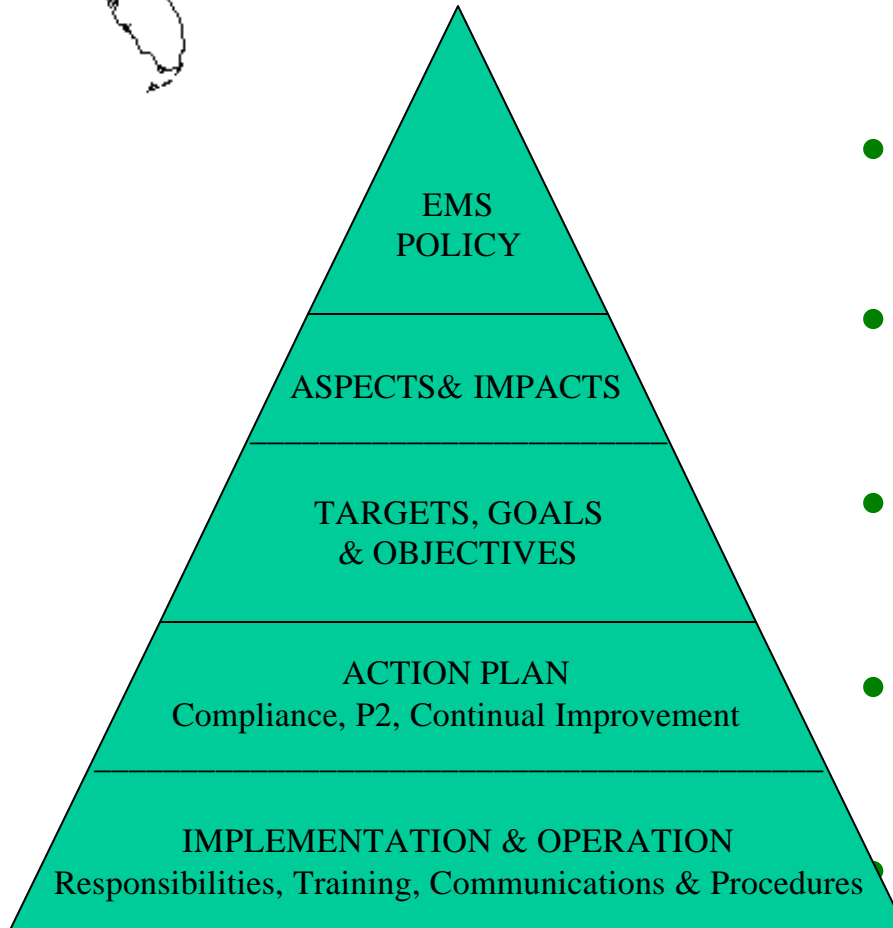


Region 4 Policy

- To support and promote the effective use of EMS
- that focus on compliance, pollution prevention and
- public outreach. Region 4 is committed to the
- following goals:
 - Ensure compliance with all regulations;
 - Consider environmental factors;
 - Implement continuous improvement;
 - Prevent pollution;
 - Provide training;
 - Establish objectives and targets;
 - Seek input from outside EPA for further improvement
 - Communicate



How an EMS Works



- We will improve the environment.
- We affect the environment.
- We reduce our effect
- What we will do.
- How we will do it.



Methodology

- Create an EMS Development Team:
 - Representatives from each division/office;
- Solicited input from environmental program leaders within Region 4.
- Identify our significant environmental aspects;
- HQ consultant to provide guidance.
- Used example documents from HQ and other Regions.



Aspects and Impacts

- An environmental **aspect** is an element of an organization's activities, products or services that can interact with the environment (e.g. use of paper, or lighting the office).
- **Impacts** cause a change in the environment (e.g. destruction of natural habitat).
- A **significant aspect** reflects its legal requirements, volume, frequency, toxicity, public perception and cost.



Identifying Significant Aspects

- Investigate all activities.
- List all aspects related to activities.
- Assess potential impacts for significance.
- Designate significant aspects
- For each significant aspect, list all pertinent activities



Identifying Significant Aspects

- Legal Concerns
 - Environmental Laws, Executive Orders, EPA guidelines
- Environmental Concerns
 - Severity of impact
 - Duration of impact
 - Probability of occurrence
- Organizational Concerns of stakeholders
 - Cost of addressing impact
 - Effect on public image and other activities

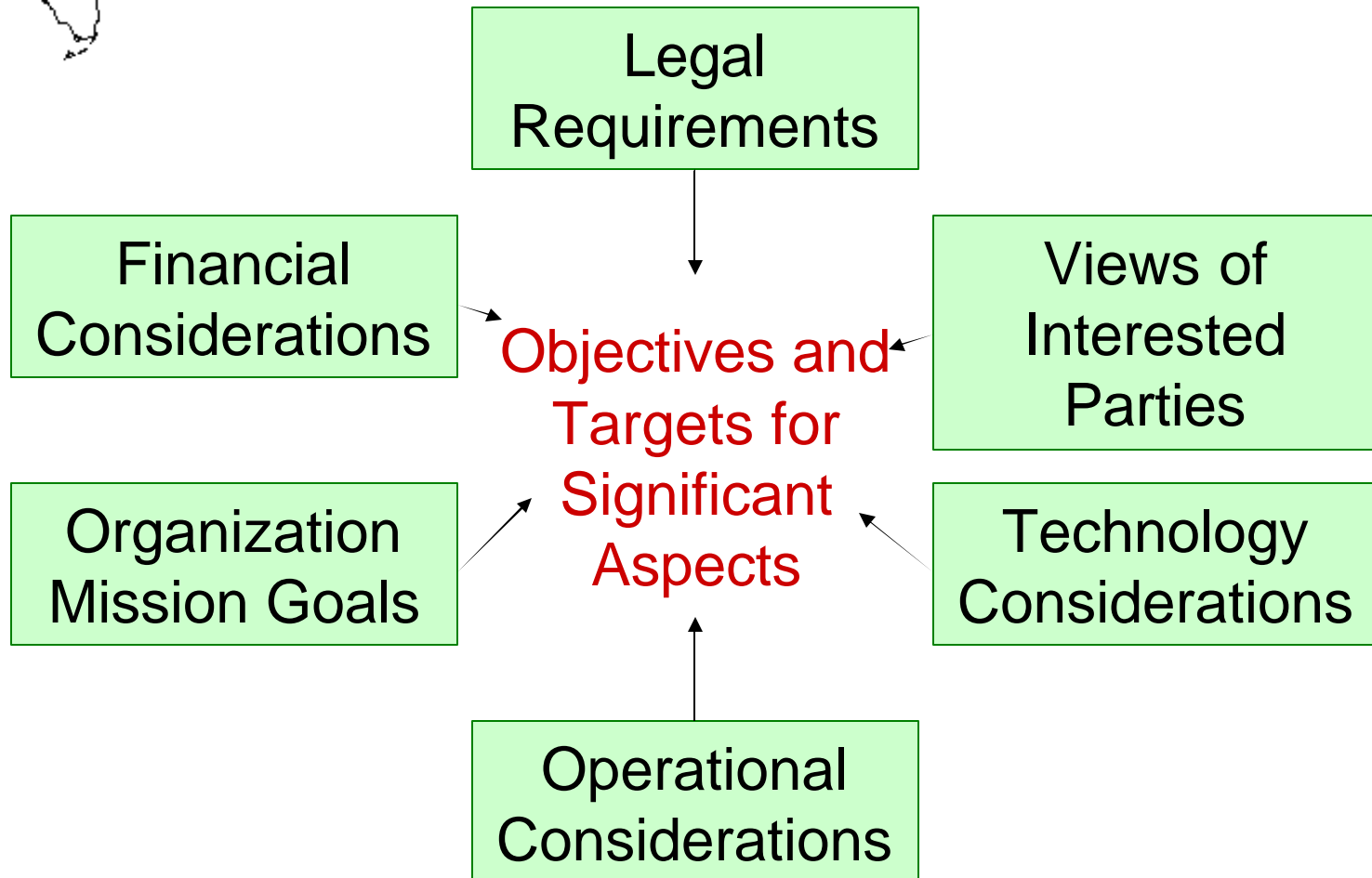


Top Aspects

- Use of Petroleum in Transportation,
- Use of Electricity (illumination, heating and cooling of office, operation of business machines),
- Use of Paper,
- Generation of waste from the disposal of office electronics (computers and monitors),



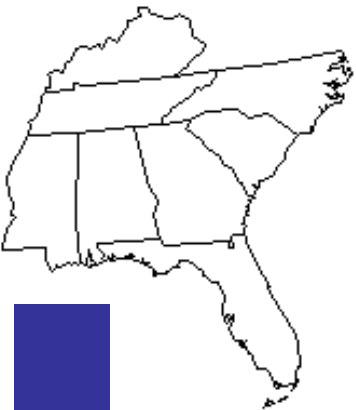
Objectives and Targets





Region 4 EMS Objectives

- **Transportation** – Reduce gasoline usage (use of AFVs, mass transit, etc.),
- **Electrical** – Attain Energy Star by 2006,
- **Paper** – Reduce paper consumption (use 2-sided, use recycled content paper),
- **Wastes** – Reduce disposal of office electronics (Federal Electronics Challenge).



Operational Controls

- Controls ensure processes, activities, operations remain within specified operating criteria:
 - Engineering controls,
 - Administrative controls.
- Specified for all processes, activities, operations, products, services that have significant aspects.



EMS Audit Elements

- Verifies existence and implementation of EMS.
- Looks at commitment by management and employees.
- Requires knowledge of systems and processes
- The EMS audit is more than a compliance audit.



Review By Management

- Periodic management assessment of EMS effectiveness.
- Based on audit results and measurement of progress and performance.
- EMS Coordinator ensures that management review decisions are incorporated to improve the EMS.



Management's Role

- Ensure continuing momentum;
- Monitor progress and performance;
- Ensure continuing availability of resources;
- Partake in goal setting;
- Recognize efforts.



Staff Involvement in EMS

- Employee involvement in EMS is essential:
 - Involvement in EMS development,
Participation in various committees.
 - Continuing performance improvement,
Look for ways of making things better.
 - Follow-through after implementation.
Do your part and encourage others.



What is expected of employees?

- Identify our own aspects and impacts;
- Understand our significant environmental aspects
- Understand and Implement the solutions.

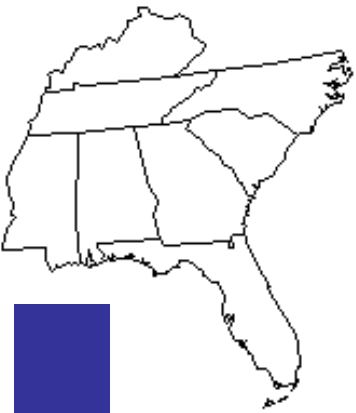
Remember: People working in the office use electricity, paper and resources and impact the environment.



Employee Involvement in EMS

- Participate in training;
- Follow our operational controls;
- Keep up with EMS developments;
- Identify other aspects and ways of reducing our environmental impact.

If you're part of the problem,
then you must be part of the solution!



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